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(19) **United States**(12) **Patent Application Publication****Ferren et al.**(10) **Pub. No.: US 2009/0316952 A1**(43) **Pub. Date: Dec. 24, 2009**(54) **GESTURE RECOGNITION INTERFACE
SYSTEM WITH A LIGHT-DIFFUSIVE
SCREEN****Publication Classification**(51) **Int. Cl.**
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(52) **U.S. Cl.** **382/103**(76) Inventors: **Bran Ferren**, Beverly Hills, CA
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Altos, CA (US)(57) **ABSTRACT**

One embodiment of the invention includes a gesture recognition interface system. The interface system may comprise at least one light source positioned to illuminate a first side of a light-diffusive screen. The interface system may also comprise at least one camera positioned on a second side of the light-diffusive screen, the second side being opposite the first side, and configured to receive a plurality of images based on a brightness contrast difference between the light-diffusive screen and an input object. The interface system may further comprise a controller configured to determine a given input gesture based on changes in relative locations of the input object in the plurality of images. The controller may further be configured to initiate a device input associated with the given input gesture.

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